



ADDENDA

**ANSI/ASHRAE Addendum d to
ANSI/ASHRAE Standard 161-2018**

Air Quality within Commercial Aircraft

Approved by the ASHRAE Standards Committee on June 22, 2019; by the ASHRAE Technology Council on June 26, 2019; and by the American National Standards Institute on June 27, 2019.

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ASHRAE Standing Standard Project Committee 161
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4.3 (Co-Cognizant), Ventilation Requirements and Infiltration
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FOREWORD

Addendum d updates the referenced filter types in Section 6.3.1, "Recirculated Air Quality," and adds/updates the respective references in Section 11.

Note: In this addendum, changes to the current standard are indicated in the text by underlining (for additions) and ~~strike through~~ (for deletions) unless the instructions specifically mention some other means of indicating the changes.

Addendum d to Standard 161-2018

Revise Section 6.3.1 as shown.

6.3.1 Recirculated Air Quality. All air that is recirculated through the aircraft systems shall pass through a high efficiency particulate air (HEPA) filter before it is supplied to the cabin. HEPA filters used for this purpose shall meet or exceed the requirements for Filter Type "A," as defined by ~~of~~ Institute of Environmental Science and Technology IEST-RP-CC001_67-21⁶ Filter Type "A," or MERV 17 or H13 according to EN 1822-1⁷ and shall provide a minimum of 99.97%

~~collection efficiency for 0.3 micron particles. Alternatively, the filters shall meet or exceed the requirements for filter Class H13 may be tested according to EN1822-1⁷, or Class ISO35H according to ISO29463²⁶, and shall provide a minimum of 99.95% overall collection efficiency at the most penetrating particle size. These filters and their mountings shall be designed, installed, and maintained or replaced according to manufacturer recommendations to prevent bypassing of unfiltered air due to media failure, improper installation, or other causes, and to prevent overloading. Alternative technology may be used to meet this requirement if it provides the same removal efficiency as required above for HEPA filters and is so demonstrated by a test method approved by a cognizant authority.~~

Revise Section 11 as shown. The remainder of Section 11 is unchanged.

11. REFERENCES

6. IEST. 2016. 2007—IEST-RP-CC001_67-2, HEPA and ULPA Filters (6th Edition) Testing ULPA Filters. Mt. Prospect, IL: Institute of Environmental Science and Technology.
26. ISO. 2011. ISO 29463-1:2011(E), High-Efficiency Filters and Filter Media for Removing Particles in Air—Part 1: Classification, Performance Testing and Marking (First Edition). Geneva, Switzerland: International Organization for Standardization.

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ASHRAE is concerned with the impact of its members' activities on both the indoor and outdoor environment. ASHRAE's members will strive to minimize any possible deleterious effect on the indoor and outdoor environment of the systems and components in their responsibility while maximizing the beneficial effects these systems provide, consistent with accepted Standards and the practical state of the art.

ASHRAE's short-range goal is to ensure that the systems and components within its scope do not impact the indoor and outdoor environment to a greater extent than specified by the Standards and Guidelines as established by itself and other responsible bodies.

As an ongoing goal, ASHRAE will, through its Standards Committee and extensive Technical Committee structure, continue to generate up-to-date Standards and Guidelines where appropriate and adopt, recommend, and promote those new and revised Standards developed by other responsible organizations.

Through its *Handbook*, appropriate chapters will contain up-to-date Standards and design considerations as the material is systematically revised.

ASHRAE will take the lead with respect to dissemination of environmental information of its primary interest and will seek out and disseminate information from other responsible organizations that is pertinent, as guides to updating Standards and Guidelines.

The effects of the design and selection of equipment and systems will be considered within the scope of the system's intended use and expected misuse. The disposal of hazardous materials, if any, will also be considered.

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